

CLAIMS

It is claimed:

1. (currently amended) An electronic control with a power supply that
5 isolates control voltages from ac source voltages, said control having a plurality
of electrical connections between digital nodes and ac nodes, said electrical
connections being made through passive components, and subsequent signals on
digital nodes being compared to ascertain the state of one or more ac paths.

2. (currently amended) The control in accordance with claim 1 wherein
10 said ascertained state of at least one of said ac paths indicates whether an ac
switching device is open or closed.

3. (currently amended) The control in accordance with claim 1 wherein
said ascertained state of at least one of said ac paths indicates whether an ac
functional load component is present.

15 4. (original) The control in accordance with claim 1 wherein at least one
of said signals is used to determine zero crossings.

5. (currently amended) The control in accordance with claim 1 wherein
said passive components limit current from said ac source through an operator to
a safe level should said operator contact any control node.

20 6. (currently amended) An electronic control with a power supply that
isolates control voltages from ac source voltages, said control having a plurality
of electrical connections between digital nodes and ac nodes, said electrical
connections being made solely through passive components, and subsequent
signals on digital nodes being compared to ascertain the state of one or more ac
25 paths.

7. (currently amended) The control in accordance with claim 6 wherein
said ascertained state of at least one of said ac paths indicates whether an ac
switching device is open or closed.

8. (currently amended) The control in accordance with claim 6 wherein said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

9. (original) The control in accordance with claim 6 wherein at least one
5 of said signals is used to determine zero crossings.

10. (currently amended) The control in accordance with claim 6 wherein said passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.

11. (currently amended) An electronic control with a power supply that
10 isolates control voltages from ac source voltages, said control having a plurality of electrical connections between digital nodes and ac nodes, said electrical connections being made through non-reactive passive components, and subsequent signals on said digital nodes being compared to ascertain the state of one or more ac paths.

12. (currently amended) The control in accordance with claim 11 wherein
15 said ascertained state of at least one of said ac paths indicates whether an ac switching device is open or closed.

13. (currently amended) The control in accordance with claim 11 wherein
20 said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

14. (original) The control in accordance with claim 11 wherein at least one of said signals is used to determine zero crossings.

15. (currently amended) The control in accordance with claim 11 wherein
25 said non-reactive passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.

16. (currently amended) The control in accordance with claim 11 wherein said electrical connections are made solely through non-reactive passive components.

17. (currently amended) The control in accordance with claim 16 wherein said ascertained state of at least one of said ac paths indicates whether an ac switching device is open or closed.

18. (currently amended) The control in accordance with claim 16 wherein
5 said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

19. (original) The control in accordance with claim 16 wherein at least one of said signals is used to determine zero crossings.

20. (currently amended) The control in accordance with claim 16 wherein
10 said non-reactive passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.